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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,988	04/06/2006	Wolfgang Arno Winkler	870-003-202	7146
4955 7590 07/26/2007 WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN, BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			EXAMINER FREAY, CHARLES GRANT	
			ART UNIT 3746	PAPER NUMBER
			MAIL DATE 07/26/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/574,988

Applicant(s)

WINKLER, WOLFGANG ARNO

Examiner

Charles G. Freay

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 14-27 and 31-41 is/are rejected.
- 7) ☒ Claim(s) 12, 13 and 28-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4/2006, 7/2007.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

Claim 19 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. All of the limitations set forth in claim 19 are included in claim 17.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19, 20, 26, 27 and 31-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 19, 20, 26 and 27 are vague and indefinite because elements are claimed which have previously been set forth using different terminology. For example the "struts" of claim 19 are set forth as the "joining members" of claim 17, the "part (40)" in claim 19 is set forth as the "air guiding member" in claim 17, and the "air passthrough aperture" of claim 19 is the "air flow passage" of claim 17.

Claims 31-40 are vague and indefinite because claim 31 sets forth in line 3 that the frame "resembles an oil-drilling rig". This is a confusing comparison because different people can have varying ideas of what an oil-drilling rig would look like.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6, 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horng et al (USPN 6,726,455, hereafter Horng) in view of German reference DE 198 04 255 (hereafter DE '255).

Horng discloses a fan for cooling electronic components having a flat carrier frame (20), a support member connected to the frame by struts (21). An annular air flow passage being formed between the flat carrier frame and the support member. The carrier frame is connected to the electronic component by plural elements (the multiple legs of element 40 and the bolt in Fig. 2). The support member carries a circuit plate connected to electrical leads. The circuit plate providing the drive and control of the electric motor which drives the fan wheel (31). Horng does not set forth that there is an air deflector or that the motor is electrically commutated. (DE '255) discloses a similar electronic component cooling fan having a bell shaped air deflector (6) at the exit of the fan. The examiner gives official notice that electrically commutated motors are well

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known electric motors and that at the time of the invention it would have been obvious to one of ordinary skill in the art to use such an electric motor given its simple design. Furthermore, at the time of the invention one of ordinary skill in the art would have found it obvious to use an air deflector as set forth by (de '255) in the Horng fan in order to direct the air to the components to be cooled in an efficient manner.

Claims 5, 10, 11, 17-23, 26, 27, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horng in view of DE '255 as applied to claim 1 above, and further in view of WO 99/07196 (hereafter WO '196).

As set forth above Horng in view of DE '255 discloses the invention substantially as claimed but does not disclose a tubular member of increasing cross section around the air flow passage. WO '196 discloses a similar cooling fan with an air deflector having a tubular member of increasing cross section (14) surrounding the air flow passage. At the time of the invention it would have been obvious to one of ordinary skill in the art to use a tubular member such as disclosed by WO '196 to direct the air at the air deflector and obtained a focused flow of air.

Claims 8, 9, 24, 25 and 33-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horng in view of DE '255 and WO '196 as applied to claims 1, 17 and 31 above, and further in view of German reference (DE 195 03 521, hereafter DE '521).

As set forth above Horng in view of DE '255 and WO '196 disclose the invention substantially as claimed but do not disclose that the leads are guided in the frame, that

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they pass through a hollow sheath, that there are spring latching elements or that the circuit board provide energy to the electric motor. DE '521 discloses an electronic component cooling fan having leads 16 are guided in the frame (12), that they pass through a hollow sheath (15), and that there are spring latching elements (61). Fig. 3 clearly shows that various of the support legs are of different length. The examiner gives official notice that providing energy to a cooling fan by a circuit board is well known and that at the time of the invention one of ordinary skill in the art would have found it obvious to use the circuit board as an electrical energy source as the nearest and most readily available energy source. At the time of the invention it would have been obvious to one of ordinary skill in the art to substitute the types of legs shown in DE '521 for the support elements (40) in Horng as a well known and simple means of supporting the fan on the electronic component while providing passage for the leads.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horng in view of DE '255 as applied to claim 1 above, and further in view of Chen et al (USPAP 2004/0100768).

As set forth above Horng in view of DE '255 discloses the invention substantially as claimed but does not disclose that the fan is reversible. Chen et al disclose in Figs. 2 and 4 a similar cooling fan having reversible air flow. At the time of the invention it would have been obvious to one of ordinary skill in the art to use a reversible fan as taught by Chen et al in the Horng device in order to be able to provide the most efficient cooling pattern.

***Allowable Subject Matter***

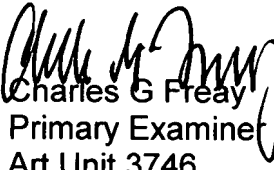
Claims 12, 13, and 28-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles G. Freay whose telephone number is 571-272-4827. The examiner can normally be reached on Monday through Friday 8:30 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Charles G Freay  
Primary Examiner  
Art Unit 3746

CGF  
July 23, 2007